Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

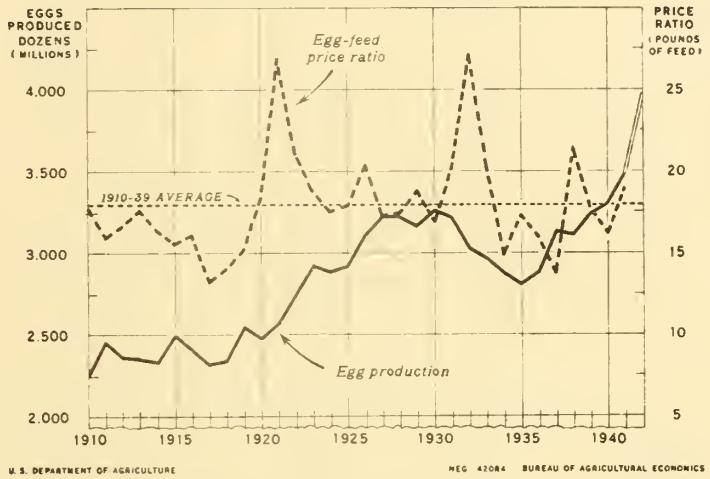
MAY 28 1942

THE Poultry and Egg SITUATION

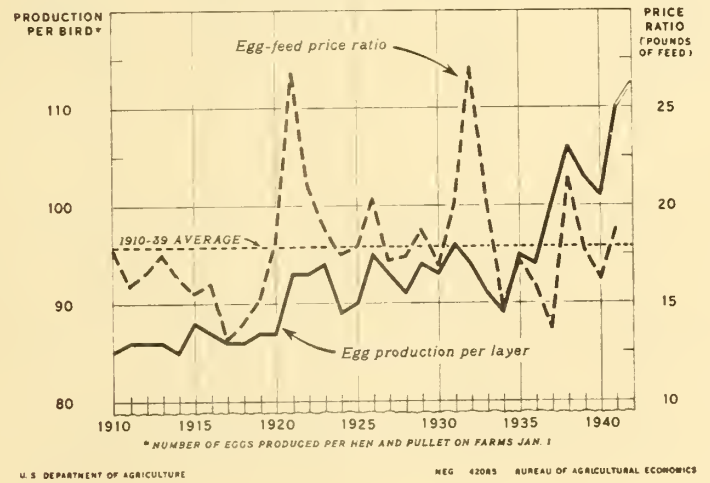
BUREAU OF AGRICULTURAL ECONOMICS
UNITED STATES DEPARTMENT OF AGRICULTURE

PES-65 BAE MAY 1942

EGG PRODUCTION ON FARMS, AND EGG-FEED PRICE RATIO, UNITED STATES, 1910-41



EGG PRODUCTION PER LAYER, AND EGG-FEED PRICE RATIO, UNITED STATES, 1910-41



EGG PRODUCTION RESPONDED RAPIDLY TO THE FAVORABLE EGG-FEED PRICE RELATIONSHIP IN 1941 AND A FURTHER INCREASE IN PRODUCTION IS TAKING PLACE THIS YEAR. IN MID-APRIL 1942 A DOZEN EGGS WAS EQUIVALENT IN PRICE TO A LITTLE LESS FEED THAN A YEAR EARLIER BUT CONSIDERABLY MORE THAN AVERAGE, INDICATING A FAVORABLE PRICE SITUATION FOR PRODUCERS. (IN THIS ISSUE POULTRY PRODUCT-FEED PRICE RATIOS ARE PRESENTED TO REPLACE THE FEED-POULTRY PRODUCT PRICE RATIOS FORMERLY PUBLISHED).

STATISTICAL SUMMARY

ITEM	UNIT	APRIL AVERAGE		1941		1942		PCT. OF YEAR EARLIER
		PERIOD	AVERAGE	MARCH	APRIL	MARCH	APRIL	
Number of layers on farms	*Millions*	1931-40	298	315	301	354	343	114
Number of eggs laid per hen	*Number*	1931-40	16.6	15.0	16.9	15.5	17.5	104
Total farm production of eggs	*Mil. cases*	1931-40	13.8	13.1	14.2	15.2	16.6	117
Stocks, eggs:[1]								
Privately owned, shell	*1,000 cases*	1931-40	3,886	1,065	2,816	1,702	4,594	163
Privately owned, frozen	*1,000 cases*	1931-40	1,540	1,691	2,654	2,549	4,068	153
USDA owned, shell	*1,000 cases*	--	--	25	215	96	56	26
USDA owned, frozen	*1,000 cases*	--	--	0	0	315	177	--
Total	*1,000 cases*	1931-40	6,046	2,781	5,685	4,662	8,895	156
Purchases, eggs, USDA:								
Dried[2]	*Mil. lb.*	--	--	0	0	26.7	56.8	--
Shell, direct	*1,000 cases*	--	--	72	387	83	21	5
Shell, blue stamp[3]	*1,000 cases*	--	--	165	182	168		102
Commercial hatchery operations:								
Eggs set	*Millions*	--	--	334	356	393	423	119
Chicks hatched	*Millions*	--	--	194	238	242	283	119
Receipts:								
Poultry, dressed, 4 markets	*Mil. lb.*	1931-40	15.6	18.4	19.2	19.6	22.4	117
Poultry, live, Chicago[4]	*Cars*	1936-40	317	262	318	293	307	97
Poultry, live, New York[4]	*Cars*	1936-40	761	473	655	648		137
Poultry, live, Midwest, per plant	*1,000 lb.*	1932-40	9.2	7.3	7.6	6.2	6.3	83
Fowl, live, Midwest, per plant	*1,000 lb.*	1932-40	8.1	6.2	6.0	5.0	4.8	80
Stocks, poultry:[1]								
Broilers	*Mil. lb.*	1936-40	6.1	5.6	4.5	8.6	5.7	127
Fryers	*Mil. lb.*	1936-40	5.8	8.0	6.0	9.5	5.1	85
Roasters	*Mil. lb.*	1936-40	13.5	23.0	18.0	24.3	15.7	87
Fowls	*Mil. lb.*	1936-40	10.7	22.0	18.0	24.5	17.6	98
Turkeys	*Mil. lb.*	1936-40	23.4	47.0	36.2	45.8	35.4	98
Ducks	*Mil. lb.*	1936-40	1.2	1.7	1.7	1.7	1.4	82
Miscellaneous and unclassified	*Mil. lb.*	1936-40	11.4	19.7	16.9	25.3	15.4	91
Total poultry	*Mil. lb.*	1936-40	72.2	126.9	101.1	139.7	96.4	95
Prices received by farmers:								
Eggs, per dozen	*Cents*	1931-40	15.4	16.4	19.7	25.8	25.6	130
Chickens, per pound	*Cents*	1931-40	14.1	14.4	15.7	18.0	18.4	117
Turkeys, per pound	*Cents*	1936-40	15.8	15.2	15.5	19.9	19.8	128
Eggs, percentage of parity	*Percent*	1931-40	71	72	87	98	96	--
Chickens, percentage of parity	*Percent*	1931-40	96	98	107	105	107	--
Turkeys, percentage of parity	*Percent*	1936-40	85	82	83	92	91	--
All farm commodities, (1910-14 = 100).	*Index nos.*	1931-40	93	103	110	146	150	136
Chickens and eggs, (1910-14 = 100)	*Index nos.*	1931-40	86	90	104	130	131	126
Wholesale prices, Chicago:								
Eggs, fresh firsts per dozen	*Cents*	1931-40	17.3	17.8	21.6	28.2	29.3	136
Live heavy hens per pound	*Cents*	1936-40	18.2	17.4	19.4	22.3	21.1	109
Live broilers, B. R., per pound	*Cents*	1936-40	22.9	21.1	21.9	24.5	24.9	114
Live roasters, light, W. R., per pound	*Cents*	--	--	21.2	21.4	24.9	25.3	118
Live roasters, heavy, W. R., per pound	*Cents*	--	--	23.1	23.8	27.2	28.3	119
Cash farm income:[5]								
Total marketings	*Mil. dols.*	1936-40	515	610	665	901		148
Poultry and eggs	*Mil. dols.*	1936-40	61	56	72	119	134	186
Price ratios:								
Chicago, Broiler, B.R., - feed	*Lb. feed*	1936-40	17.3	16.9	16.6	14.4	14.6	88
Chicago, Light roasters, W. R., - feed.	*Lb. feed*	1936-40	20.8	16.9	16.2	14.6	14.8	91
Farm, Egg - feed	*Lb. feed*	1931-40	13.6	14.2	15.9	15.5	15.4	97
Farm, Chicken-feed	*Lb. feed*	1931-40	12.9	12.4	12.7	10.8	11.1	87
Farm, Turkey-feed	*Lb. feed*	1931-40	12.9	13.1	12.5	12.0	11.9	95
Feed cost per cwt., farm poultry ration.	*Dollars*	1931-40	1.18	1.16	1.24	1.66	1.67	135
Wholesale food prices (1935-39 = 100)	*Index nos.*	1931-40	91.3	95.1	98.5	121.5	124.8	127
Retail food prices (1935-39 = 100)	*Index nos.*	1931-40	95.7	98.4	100.6	118.6	119.6	119
Prices paid, int. and taxes 1910-14 = 100)	*Index nos.*	1931-40	128	129	129	150	151	117
Retail prices (BLS):								
Roasters, dressed, per lb.	*Cents*	1931-40	30.5	32.1	33.2	35.7	35.7	108
Eggs, strictly fresh, per dozen	*Cents*	1931-40	27.6	29.4	32.5	39.7	39.4	121
Nonagricultural employees' compensation (1924-29 = 100)	*Index nos.*	1931-40	83.9	119.9	121.9	145.4		121

[1]End of month. Frozen eggs converted to case equivalent.

[2]Includes purchases for future delivery.

[3]Adjusted for wastage in distribution.

[4]Car equivalent of receipts by freight, truck and express.

[5]Figures for 1941 and 1942 are not strictly comparable; figures for poultry and eggs for 1942 are based on revised production data and include broilers.

THE POULTRY AND EGG SITUATION

Summary

Consumer purchasing power diverted from products with controlled prices may eventually increase demand and prices for poultry products. No maximum prices for poultry and eggs were established by the general price order of April 28, since prices for these products were below minimum levels at which ceilings for farm products may be established as stipulated in the Emergency Price Control Act of 1942.

Previous indications of large chicken output this year are being verified. Hatchery output of baby chicks in April was 19 percent larger than in April 1941 and the number of young chickens on farms May 1 was 16 percent more than last year. Production of turkeys also will be considerably larger this year. The stronger demand for all meats will tend to offset the effects on prices of the larger supplies, so that prices received by farmers for chickens and turkeys probably will average higher this year than last.

Egg production will decline seasonally until November but is likely to continue much larger than a year earlier. In April - the seasonal high point in egg production increases over last year were 14 percent in the number of layers and 17 percent in the output of eggs. Because of the favorable relationship between egg prices and feed prices, farmers continue to delay marketing their old hens and to feed better than usual. Egg prices throughout the year are likely to be favorable for egg production, since large quantities will be purchased for lend-lease and consumer demand is strong. In early May wholesale prices of eggs at Chicago declined somewhat but in mid-May were about the same as a month earlier and about 30 percent higher than in May 1941.

The supply of feed grains per animal unit in 1942-43 may be considerably smaller than in 1941-42 and feed grain prices probably will be higher. Supplies of high-protein feeds, on the other hand, probably will be larger and prices of such feeds may average a little lower.

-- May 22, 1942

REVIEW OF RECENT DEVELOPMENTS

Number of Layers Continuing to Increase Relative to a Year Earlier

During recent months the number of layers on farms declined less than usual and in April was about 14 percent larger than in April 1941 and the largest on record for the month. Increases over a year earlier by regions were as follows: North Atlantic, 7 percent; East North Central, 10 percent; West North Central, 17 percent; South Atlantic, 15 percent; South Central, 19 percent; Western, 8 percent. Numbers were the largest on record in the North Atlantic and South Central regions and were only a little below previous records in other regions.

During April the average number of eggs laid per bird in the United States was about equal to the previous record for the month established in 1938. The April rate was about 3 percent over April last year. Increases over a year earlier in the rate of lay, in general, were largest in regions with greatest increases in numbers of layers. Increases in egg production by regions over the April 1941 output were as follows: North Atlantic, 10 percent; East North Central, 14 percent; West North Central, 23 percent; South Atlantic, 18 percent; South Central, 22 percent; Western, 10 percent.

Receipts of eggs in April at primary markets in the mid-West were about 50 percent larger than a year earlier. Receipts in Pacific Coast States were up about 25 percent, and at egg auctions in the East, over 30 percent. But because of heavy Government buying in producing areas, largely in dried form, receipts at terminal markets were a little smaller than in April last year. Apparent domestic consumption was about the same as in April 1941.

Dried Egg Industry Now Using About 2 Million Cases of Eggs per Month

The estimated output of dried eggs in April was 21.7 million pounds, equivalent to about 2.2 million cases of shell eggs. On the average, a case of shell eggs yields approximately 10 pounds of dried whole egg. Dried egg plants are located mostly in the midwestern States and encourage record production in that area by offering farmers an exceptionally favorable outlet for eggs. In addition to the liquid eggs being dried immediately, considerable quantities of such eggs are being placed in freezers for drying later in the year when current farm production of eggs is at a lower level. Shell eggs also are being stored for this purpose.

During April, the into-storage movements of both shell and frozen eggs were the largest on record. On May 1 increases compared to last year in stocks of shell eggs were 53 percent, and in stocks of frozen eggs, 60 percent, with total stocks 56 percent larger. Holdings of shell and frozen eggs in the United States Department of Agriculture were reduced considerably during April.

Egg Prices Changed Little During the Month Ending in mid-May

Egg prices advanced slightly during late April but declined somewhat in the first half of May, leaving mid-May prices about the same as in mid-April. Compared with a year earlier, however, prices at Chicago in mid-May were nearly a third higher.

The average price received by farmers for eggs in mid-April -- 25.6 cents per dozen -- was 30 percent higher than last year and the egg-feed price ratio, although a little less favorable than in April last year, continued unusually favorable for egg production.

Fowl Marketings Continuing Smaller Than a Year Earlier

Reductions in number of layers on farms this year have been relatively smaller than last year, and receipts of live fowl at midwest markets have continued smaller than in corresponding weeks of 1941. The extent of decline from a year earlier has been reduced in recent weeks, however. As a result of the large production of young chickens this spring, receipts of live poultry at New York and Chicago together have been a little larger than last year. Production of chickens in some broiler areas has declined moderately, but output for the country as a whole continues large.

Receipts of dressed poultry, fresh and frozen, at the four principal markets continues to average larger than in corresponding periods of 1941. Net withdrawals of all storage poultry in April were about 14 million pounds (48 percent) above the previous record withdrawals for the month and about 17 million pounds more than in April 1941.

Prices of Live Chickens and Fowl Declined Slightly During the Past Month

Prices of heavy hens and leghorn hens were steady during the past month, but prices of medium heavy hens were somewhat lower in mid-May than in mid-April. Prices of young chickens averaged slightly lower in mid-May than a month earlier. Prices of hens were a little higher than last year, and prices of young chickens were about 30 percent higher than in mid-May 1941. During the third week of May, prices of young chickens advanced considerably in eastern markets.

POULTRY PRODUCTS FOR LEND-LEASE

Eggs and Egg Products

Purchasing of agricultural products under the lend-lease authority was inaugurated in late March and early April of 1941. Previously the Department of

Agriculture purchased shell eggs as a price-supporting measure, and continued this program for several months after March 1941, accepting offers made in terms of United States wholesale and retail grades (United States Standards No. 1 wholesale grade or better). Offers were accepted the day after being received, and delivery took place within ten days of the acceptance date.

Beginning September 15, 1941 purchasing of shell eggs of export grades was begun and the former practice of purchasing wholesale and retail grade eggs was discontinued. Tentative United States export grades, of relatively high average quality, were developed and adopted to meet lend-lease requirements. Purchasing eggs of export grades continued until late February 1942. Purchase of eggs of wholesale grades primarily for price supporting purposes was resumed in early March, 1942.

The frozen egg purchase program was inaugurated in early May 1941. First purchases were made for delivery within 45 days, but the program was later modified so that frozen eggs could be offered for current or future delivery -- the vendor choosing the delivery date for each quantity offered. On September 12 last year it was announced that purchases of frozen eggs were being discontinued. Deliveries continued for sometime after that date, however.

The dried egg purchase program was established in April last year. The first announcement specified that delivery was to be made within 45 days of the acceptance date. A later announcement called for delivery within 15, 30 or 45 days and this provision was modified on May 15, 1941 to permit delivery at any date specified by the vendor, up to March 31, 1942. On February 25, 1942 it was announced that offers would be accepted for delivery any time up to December 31, 1942. To expedite the dried egg program, purchase prices for dried eggs for future delivery, New York basis, have been announced by two-week intervals during the past several weeks.

By far the largest quantity of dried egg products purchased to date has been spray-dried whole egg. In addition, quantities of dried albumen and dried yolk packed separately in the proportions of 1 pound of dried albumen to 2.5 pounds of dried yolk, and dried albumen (spray and pan process) have been purchased. Dried egg products, as purchased, have been packed largely in 150 and 200 pound barrels. For some purposes the Department of Agriculture has contracted with firms to package considerable quantities of the dried product previously purchased in consumer-size packages of 5 ounces net.

At times during the past year it has been desirable for the Department to have part of its holdings of shell eggs dried or exchanged for eggs previously dried. In early June last year offers to process were invited and in August a procedure was announced whereby shell eggs owned by the Department of Agriculture were exchanged for dried eggs.

In addition to the procedures mentioned above, all of which were transacted under the offer and acceptance plan, the Department has purchased eggs on the Chicago and New York Mercantile Exchanges. Eggs were purchased directly in some of the thirteen southern States by firms authorized to purchase eggs from producers at previously announced prices. Both of these practices were

primarily for price support purposes and the eggs so obtained are being used for school lunch programs and Red Cross purposes, among others.

Canned Chicken and Turkey

Announcement of the program to purchase canned boned chicken was made on September 3, 1941. Under this program, purchases were made for delivery within 30, 60 or 90 days after acceptance of the offer. In an announcement released on October 8, the canned chicken purchase program was generally clarified and procedures to be used were made more definite. The class of poultry from which the product was obtained was to be specified in the offers. Old cocks, roasters, or fowl could be used, and, except for a tolerance of 10 percent, only one class of poultry was to be included in any single lot as offered. The purchase period was to extend from October 15 to December 31, and the period of delivery was to be specified in the offer. In the last announcement pertaining to poultry (made on December 1, 1941), the period of purchase was extended to March 1, 1942 and offers for the sale of canned turkey made from young toms also were invited. As in previous instances, the period of delivery was to be specified in the offer.

In the following tables the status of the United States Department of Agriculture purchase program is summarized as of May 1, 1942.

Poultry products: Purchases, deliveries and unfilled contracts, United States Department of Agriculture

Item	Shell eggs	Frozen eggs	Dried eggs	Canned chicken	Canned turkey
	Cases	Pounds	Pounds	Pounds	Pounds
Purchases in 1941 (Mar. 15-Dec. 31)	1,564,874	66,189,090	44,611,385	4,928,404	1,190,520
Purchases in 1942 (Jan. 1-May 1)	420,315	0	112,191,920	712,200	84,500
Total	1,985,189	66,189,090	156,803,305	5,640,604	1,275,020
Monthly deliveries in 1942					
January	23,000	902,720	9,497,600	1,384,320	9,500
February	126,278	0	15,551,272	1,783,568	359,084
March	115,779	0	9,917,037	1,444,972	420,146
April	37,301	0	18,508,254	1,710,624	204,774
Unfilled contracts as of May 1, 1942	0	1,442,613	76,700,430	80,000	291,016

Data from Agricultural Marketing Administration.
Conversion factors: 1 case of shell eggs yields 37.5 pounds of frozen eggs, or 10 pounds of dried eggs; 4 pounds of dressed chicken or turkey yields approximately 1 pound of canned product.

Commitments of dried eggs for future delivery
as of May 1, 1942

Month	Commitment	Month	Commitment
	Pounds		Pounds
May	18,203,590	September	6,863,740
June	9,837,465	October	10,719,410
July	5,873,745	November	7,292,205
August	6,249,855	December	4,971,795
		Total (May-December)	70,011,805

Data from Agricultural Marketing Administration.

During the first half of May the Department of Agriculture made the following purchases for current and future delivery: shell eggs 22,648 cases, dried eggs about 17 million pounds.

Purchase Program for Poultry Products Now in Effect

Under programs now in operation, the Department of Agriculture is purchasing dried eggs under the offer and acceptance plan for delivery during any month in 1942. In recent weeks, dried eggs have been purchased under an "announced price" plan. This procedure was adopted to provide processors an opportunity to plan operations somewhat in advance, such as the storing of shell eggs for drying later in the year. On May 1, combined stocks of shell and frozen eggs were more than 3 million cases larger than last year. The excess over a year earlier probably will be increased considerably by August 1, the probable seasonal peak in holdings.

With respect to shell eggs the following programs are in effect: (1) offer and acceptance plan for the purchase of Standards, No. 1, or better, in carload lots from anywhere in the United States and Standards, No. 4, or better, in lots of 100 cases or more in certain southern States; and (2) direct purchase plan whereby local firms are authorized by the Department to purchase eggs grading Standards, No. 4, or better in certain southern States in lots of ten cases or more at previously announced prices. Egg prices in general have been well above the support level (85 percent parity) in the past several weeks and consequently relatively few shell eggs have been purchased.

OUTLOOK

Chickens and Eggs

Maximum prices for poultry products were not established by the General Maximum Price Regulation Order because prices received by farmers for these commodities are below the minimum levels at which ceilings can be established, as stipulated in the Emergency Price Control Act of 1942. This Act, as it applies to poultry products was discussed in the February issue of this report.

The outlook for chickens and eggs may be summarized as follows:

(1) The egg-feed price ratio probably will not average as high this year as last but is likely to continue favorable for egg production.

(2) Favorable egg prices will encourage delayed marketing of old hens and better feeding than usual. Egg production in the United States this year, therefore, probably will be at least 13 percent larger than in 1941, which is the goal established for production this year.

(3) Large quantities to be taken for lend-lease and stronger consumer purchasing power probably will more than offset the effects on egg prices of larger production this year.

(4) Because of the increase in the number of chickens raised on farms, supplies of chicken this year and the number of layers at the beginning of 1943 will be larger than last year and by far the largest on record.

(5) Because of the stronger consumer demand, particularly for meats, prices received by farmers for chickens may average higher this year than last despite the prospective large increase in supplies.

Turkeys

Indications continue to point to a larger turkey crop this year than last. In February farmers indicated their intentions to start 8 percent more poults than in 1941. The output of poults from a sample of hatcheries in April this year was 8 percent larger than in April 1941 and for several months has been larger than a year earlier. Advance orders for poults on May 1 were 13 percent more than last year. With a strong demand for all meats in prospect it is likely that turkey prices will continue favorable for producers. Cash farm income from turkeys this year, therefore, will be considerably larger than in 1941.

Feed Supplies and Prices

Because of the increasing production of livestock and livestock products the demand for feeds will become greater. As a result, the carry-over of feed grains during 1942-43 may be reduced from a year earlier even with larger production this year and larger imports of oats and barley from Canada. However, stocks at the end of 1942-43 are likely to be about average unless crop yields of corn and oats in 1942 are below normal.

Feed grain prices in 1942-43 probably will be higher than in 1941-42 since supplies per animal will be considerably smaller and the demand will be stronger. Supplies of oilseed meals per animal, however, are likely to be larger than in the current season and prices may average a little lower.

Price Ceilings to Have Little Immediate Effect on Feed Prices

Although price ceilings have been established for all byproduct feeds except linseed meal, prices of all of these products, except bran in certain

cities, are below the ceiling levels and are likely to continue below such levels for the next few months. No price ceilings have been established for feed grains or for mixed feeds. The egg-feed price ratio in April was a little less favorable than in April last year and although it may average lower this year than last it is likely to continue favorable for egg-production.

POULTRY PRODUCT-FEED PRICE RATIOS EXPRESSED IN TERMS OF FEED

The Department of Agriculture has used two general methods of expressing ratios between prices of feed and prices of livestock products. For the past several years all ratios except those for poultry products have been expressed in terms of the amount of feed one unit of the product would buy. For poultry products the ratio has been expressed as the quantity of product required to purchase 100 pounds of feed. These have been called feed-egg, feed-chicken, and feed-turkey price ratios. These ratios were computed by dividing the price of 100 pounds of feed by the price per unit of poultry products.

Because of the widespread use now being made of the ratios for poultry products - especially for eggs - by people dealing with many other products as well as poultry, it has become particularly desirable to express all ratios on a common basis. Data presented in the accompanying tables on poultry product-feed price ratios are comparable with ratios published by the United States Department of Agriculture for other commodities. Since these ratios are computed by dividing the price per unit of poultry products by the price of feed per pound - the opposite of the former method - they are called egg-feed, chicken-feed, and turkey-feed price ratios.

The ratios computed on the new basis can be used for essentially the same purposes as those formerly published. It is necessary, of course, when interpreting them, to realize that a favorable ratio is denoted by a high ratio rather than a low one and vice versa. In mid-April, for example, the feed-egg ratio based on United States average prices was 6.5 dozens of eggs. In April 1941 the feed-egg ratio was 6.5 dozens of eggs. In other words, the feed-egg ratio was a little less favorable in April this year than last because slightly more eggs were required to buy a given quantity of feed than in April 1941. The egg-feed ratio in April this year was 15.3 pounds of feed (per dozen eggs) compared with 15.9 pounds a year earlier. Thus, the egg-feed ratio also can be said to have been a little less favorable than in April last year because a dozen eggs was equivalent in price to a slightly smaller quantity of feed than in April 1941. Both ratios indicate that the relationship between feed prices and egg prices was less favorable to producers than in April 1941 by about the same degree.

Likewise, compared with the 10-year (1931-40) average, the ratios computed by either method indicate that the present relationship between egg prices and feed prices is relatively favorable for egg production. It is interesting to note, however, that the comparison of each current ratio with its respective average for a given month will not always indicate exactly the same relative position. This follows because the two methods of computing ratios are the reciprocals of each other, and the reciprocal of an average

is not identical to an average of reciprocals. But for practical purposes, this difference can be disregarded once a given method of computing the price relationship has been adopted.

Why the Method of Computation was Changed at this Time

As indicated above, it has become particularly desirable to express all ratios on a common basis because the data now are used widely by people dealing with other livestock products as well as poultry. Since the ratios computed for other commodities are greater in number than those computed for poultry and since many of the people now beginning to use the ratios for poultry products are accustomed to using the ratios for other commodities, it would result in less total confusion to change the poultry ratios rather than the others. Naturally, of course, the change will result in some difficulty for poultry specialists who have become accustomed to using the ratios computed on the other basis. However, this will be temporary whereas if the change were not made there would be constant confusion among many people as a result of having the ratios on two different bases. Extension men and other individuals in many States already have changed from a feed-egg to an egg-feed basis. The Bureau of Agricultural Economics and other agencies of the Department will give all possible assistance to individuals wishing to change their records to the new basis. Usual charts and other materials showing data on the egg-feed ratio will be supplied.

Uses Made of Price Ratios

The most important use made of any ratio between feed prices and livestock product prices is in forecasting future production. A ratio alone, of course, such as the egg-feed ratio, cannot be used to show whether poultrymen are making or losing money at any one time. Many factors other than feed costs and egg prices determine the profitableness of an individual laying flock. For an individual poultryman to determine the profitability of his flock fairly detailed records must be kept. The egg-feed ratio only provides a rough means of forecasting what the majority of producers will decide on the basis of their financial outcome during a given period. A ratio based on average prices therefore is used primarily by those individuals who are particularly interested in future production trends, and are used relatively little by individual producers. When the egg-feed price ratio is high, feed costs are low in relation to egg prices, and, other things being equal, it is more profitable to produce eggs than when the ratio is low.

Other considerations also are important in interpreting a given ratio between prices of poultry products and feed prices. Foremost among these are the level of prices in general and the relative favorableness of ratios for other livestock enterprises. Either of these may more than offset the direct effects on production of a given ratio. In the depression years, for example, the egg-feed price ratio was much more favorable than average, but cash farm income was at such a low level that farmers had difficulty in meeting fixed costs after paying for feed. When prices in general are relatively high,

egg producing operations may be profitable despite a ratio less favorable than average. The second important consideration - the relative favorableness of other ratios - has its widest application in the Midwest but applies at least to some extent in all areas of the country. With production of all livestock products at or above previous records, it is particularly necessary to consider the relative positions of all ratios when appraising the outlook for the farm production of any one product.

Characteristics of the Poultry Product-Feed Price Ratios

The same mixture of feeds is used in computing the feed-poultry product price ratios as in the past. This ration is composed of 62 percent corn, 14 percent wheat, 8 percent oats, 2 percent barley, 9 percent bran, and 5 percent tankage, by weight. The prices used are mid-month prices received by farmers for corn, wheat, oats, and barley, and prices paid by farmers for bran and tankage. Poultry product prices used are the mid-month average prices received by farmers. The feed ration is not necessarily recommended for poultry producers and, in fact, may not be used as such anywhere in the United States. But since the constituents compose a very large percentage of all rations and price changes of all feeds are more or less uniform, the price changes of that mixture are significant. Rations used in present-day poultry feeding operations are flexible, of course, and include many additional ingredients. The Bureau of Agricultural Economics is now collecting monthly data on prices paid by farmers for ready-mixed poultry feeds. In the near future these may also enter into the computation of poultry product-feed price ratios.

The annual averages given in the accompanying tables are simple averages of monthly data for the egg-feed and chicken-feed price ratios. For turkeys annual ratios were computed between the weighted average price received by farmers for turkeys in the months October through January and the weighted average price of feed used during the growing season (May to November). The annual ratio for turkeys is more logically constructed than monthly ratios, since the latter, during the growing season, expresses the relationship between prices paid for feed in the growing season and prices received for breeder hens that were produced the year before.

The egg-feed price relationship is more important than the chicken-feed price relationship in causing changes in the production of chickens on farms in the United States. The relative favorableness of the chicken-feed price relationship, however, is of some importance in causing changes in types of chickens raised for egg producing purposes. During the past year, for example, the egg-feed price ratio has been relatively much more favorable than the chicken-feed price ratio and the demand for light breed chicks has been exceptionally strong this spring. Changes in the chicken-feed price relationship, of course, affect the production of commercial broilers. Because of the less favorable relationship between broiler prices and feed prices during the past several months the production of commercial broilers in some areas has declined moderately.

Table 1.- Egg-feed price ratio, 1910-42 1/

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av. 2/
1910	22.4	19.1	15.3	13.9	13.8	13.6	13.3	13.8	16.3	19.8	24.2	27.0	17.7
1911	23.8	17.4	14.1	13.1	12.6	12.0	11.7	12.6	14.2	16.5	20.0	22.6	15.9
1912	22.3	19.9	15.3	11.8	10.9	10.8	10.5	12.7	13.6	19.0	25.0	27.0	16.6
1913	23.4	19.4	16.2	14.0	13.6	13.7	13.2	13.6	15.5	19.3	23.5	24.3	17.5
1914	22.3	18.9	16.1	11.7	12.0	12.3	12.6	13.2	14.9	16.5	20.8	23.8	16.3
1915	22.1	15.5	10.7	10.6	10.5	10.7	11.0	11.9	14.9	19.1	24.0	24.8	15.5
1916	21.3	17.4	13.1	12.5	13.0	13.3	13.7	13.9	15.6	17.8	19.5	21.0	16.0
1917	20.3	18.0	11.9	11.2	10.3	10.1	9.2	9.4	11.7	13.3	15.6	17.5	13.2
1918	18.1	16.1	10.4	10.2	10.4	10.1	11.2	11.7	13.1	15.7	19.0	21.6	14.0
1919	19.8	12.8	12.2	12.3	12.6	11.5	11.7	12.3	13.8	17.8	21.3	24.4	15.2
1920	20.4	16.0	12.9	10.9	10.6	9.9	11.0	13.4	17.0	23.0	33.1	40.9	18.3
1921	35.0	20.7	18.3	15.0	14.5	15.0	18.9	23.6	26.6	36.6	49.1	48.7	26.8
1922	29.0	26.1	14.5	14.5	15.0	15.0	15.1	15.3	20.3	25.3	30.6	31.8	21.0
1923	24.5	18.9	15.6	13.0	13.0	12.7	13.2	14.8	18.6	21.3	29.1	30.3	18.8
1924	23.6	22.1	13.4	12.6	13.1	13.7	12.9	13.6	16.3	19.1	24.1	25.0	17.5
1925	22.8	16.4	11.3	12.4	12.3	12.7	14.3	15.1	16.5	22.3	28.7	29.9	17.9
1926	22.6	18.3	15.8	16.4	16.6	16.8	16.6	16.1	19.7	23.1	30.0	32.3	20.4
1927	25.0	19.2	13.8	13.5	12.3	9.8	11.3	12.6	15.9	20.1	25.7	26.7	17.2
1928	23.2	17.0	13.0	12.1	11.8	11.8	13.0	15.2	17.9	21.0	25.6	27.0	17.4
1929	20.3	18.5	16.0	13.5	14.7	15.9	15.7	16.4	18.4	21.3	26.7	28.3	18.8
1930	24.1	20.2	14.0	14.4	13.1	12.0	13.1	12.9	15.6	17.8	24.8	21.2	16.9
1931	18.6	12.4	15.0	14.4	12.3	13.6	14.9	18.6	23.3	31.6	33.1	33.4	20.1
1932	22.8	17.5	14.5	14.3	15.0	16.4	18.8	22.9	28.3	42.4	53.0	59.4	27.1
1933	45.3	22.9	19.9	15.8	14.1	11.7	11.2	12.6	16.3	23.6	26.2	23.5	20.3
1934	18.8	16.1	14.3	13.3	13.0	11.6	11.8	12.3	14.6	15.9	19.3	16.9	14.8
1935	15.5	15.9	11.9	12.5	13.6	14.0	15.1	16.2	19.0	20.8	26.2	25.7	17.2
1936	20.1	20.6	15.0	14.5	15.4	16.0	13.4	12.2	13.2	15.5	18.5	16.8	15.9
1937	12.0	10.2	10.1	9.4	8.4	8.7	9.6	11.6	14.1	20.6	25.9	23.9	13.7
1938	18.8	14.4	14.6	14.4	16.2	17.2	18.9	22.1	26.3	30.7	33.0	30.3	21.4
1939	19.1	17.1	16.6	15.4	14.2	14.2	16.4	18.4	17.8	21.4	23.6	18.0	17.7
1940	15.4	16.9	12.7	12.0	11.8	11.8	13.9	14.7	18.1	20.7	22.8	23.8	16.2
1941	17.2	14.8	14.2	15.9	15.6	17.5	18.7	19.3	20.6	22.7	25.5	23.2	18.8
1942	19.8	16.8	15.5	15.4									

1/ Number of pounds of feed equal in value to 1 dozen eggs at local markets.
2/ Simple average of monthly ratios.

Table 2.- Chicken-feed price ratio, 1910-42 1/

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av. 2/
1910	8.3	8.4	8.7	9.1	9.3	9.3	9.1	9.0	9.2	9.5	9.8	9.6	9.2
1911	9.6	9.5	9.6	9.6	9.5	9.2	8.9	8.6	8.4	8.0	7.7	7.5	9.0
1912	7.6	7.7	7.6	7.4	7.1	7.1	6.9	7.9	7.5	9.0	9.9	10.3	7.9
1913	10.2	10.1	10.3	10.3	10.1	9.8	10.5	9.8	9.2	9.6	8.6	8.4	10.0
1914	8.6	9.0	9.0	9.3	9.0	9.4	9.7	9.0	8.5	8.4	8.2	8.0	9.0
1915	7.6	7.4	7.6	7.6	7.6	8.1	8.2	8.4	8.7	9.2	9.4	8.9	8.2
1916	8.5	8.7	9.0	9.3	9.5	9.8	9.7	9.1	8.7	8.4	7.8	7.5	8.8
1917	7.5	7.6	7.4	6.8	6.0	6.0	5.5	5.2	6.0	6.4	6.4	6.7	6.3
1918	6.8	7.1	6.8	7.0	7.0	7.3	7.9	7.8	7.9	7.8	8.0	8.2	7.5
1919	7.9	8.0	8.4	8.8	8.7	8.4	8.3	7.9	8.0	8.1	7.9	7.7	8.3
1920	7.8	8.5	8.6	8.5	7.9	7.5	8.2	8.4	9.4	10.3	12.0	12.6	9.0
1921	14.0	14.9	15.5	16.2	16.3	16.0	16.9	17.5	17.4	17.8	18.3	17.3	16.3
1922	17.3	15.8	14.4	14.5	14.5	15.3	15.4	14.0	13.8	13.2	12.1	11.6	14.3
1923	11.2	11.8	11.6	11.7	12.0	12.3	12.8	12.4	12.3	11.7	11.3	11.1	11.9
1924	11.7	12.0	12.4	12.8	13.4	13.3	11.5	10.4	10.1	9.7	9.7	9.0	11.3
1925	8.7	8.8	9.5	10.8	10.9	10.5	11.0	10.5	10.8	11.8	11.8	12.1	10.6
1926	13.0	13.6	14.3	15.3	15.6	15.6	15.3	13.5	13.4	13.1	13.4	13.4	14.4
1927	13.6	14.0	14.1	14.4	13.5	11.1	10.9	10.6	10.5	11.1	12.0	11.8	12.2
1928	11.9	11.8	11.2	11.0	10.4	10.6	11.1	11.9	12.7	13.2	13.9	13.4	12.0
1929	13.3	12.8	13.0	14.0	14.7	14.9	13.7	12.5	12.1	11.9	12.2	11.8	13.3
1930	12.4	13.0	13.6	14.1	13.1	12.3	12.1	10.9	11.0	11.7	12.6	12.1	12.3
1931	13.2	13.3	14.2	14.8	14.7	15.5	16.0	17.4	19.1	20.1	18.1	18.1	16.2
1932	17.6	17.3	17.6	17.7	17.7	17.6	18.3	18.2	19.1	20.2	20.5	19.5	18.6
1933	19.7	19.6	17.9	15.1	12.4	11.6	8.9	9.3	9.5	10.6	9.6	9.4	11.7
1934	10.0	10.4	10.6	10.9	11.0	9.9	9.8	8.2	8.5	7.9	7.9	7.3	9.2
1935	7.7	8.3	9.1	9.7	9.9	10.4	9.7	10.0	11.1	11.7	13.9	14.3	10.3
1936	14.6	14.6	14.2	14.6	14.1	13.9	10.7	8.2	8.0	7.8	7.5	6.9	10.8
1937	7.0	6.9	7.3	7.1	6.9	7.3	7.6	9.6	10.7	14.4	15.6	15.1	9.1
1938	14.6	14.0	14.3	14.7	14.8	14.3	14.2	14.9	15.1	15.4	15.5	14.8	15.0
1939	14.3	14.5	14.8	14.3	13.0	12.8	13.6	13.7	11.8	11.9	11.3	10.2	13.0
1940	10.1	10.2	10.6	10.4	10.6	10.9	11.6	11.5	11.8	11.6	11.4	11.5	11.2
1941	11.9	12.3	12.4	12.7	12.6	12.3	12.3	11.7	11.1	11.4	11.1	10.7	11.9
1942	10.8	10.6	10.8	11.1									

1/ Number of pounds of feed equal in value to 1 pound of live chicken at local markets.

2/ Simple average of monthly ratios.

Table 3.- Turkey-feed price ratio, 1929-42 1/

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av. 2/
1929	17.3									15.1	16.3	14.5	14.4
1930	14.9									14.1	15.7	15.8	13.8
1931	18.2									24.9	23.0	25.3	22.0
1932	23.9									24.9	26.2	23.0	20.7
1933	21.6	20.8	19.7	15.8	12.9	11.9			10.7	12.8	12.9	12.1	11.9
1934	12.4	12.3	12.1	12.0	11.3	9.8	9.1	7.9	7.9	8.5	9.9	10.0	10.6
1935	9.9	10.0	10.1	9.8	9.6	9.5	9.4	9.3	10.4	11.9	17.3	19.1	14.9
1936	17.5	16.2	15.3	14.8	13.8	13.1	10.2	8.4	8.5	8.9	8.5	7.9	8.5
1937	7.3	7.1	7.2	6.7	6.6	6.7	6.9	8.1	9.2	13.7	16.5	16.5	11.8
1938	15.3	15.5	15.5	15.4	15.1	14.7	14.9	15.8	16.9	18.7	19.4	20.0	18.8
1939	18.6	17.9	18.2	16.8	14.6	14.0	14.3	15.1	13.3	14.3	14.6	13.7	14.5
1940	12.0	11.7	11.3	10.8	10.3	10.6	11.0	11.5	12.3	12.8	13.5	14.1	13.3
1941	13.5	13.3	13.1	12.5	11.9	11.6	11.5	11.6	11.9	13.4	14.5	14.2	14.5
1942	13.0	12.2	12.0	11.9									

1/ Number of pounds of feed equal in value to 1 pound of live turkey at local markets.

2/ Ratio between weighted average price received by farmers for turkeys in months October-January and average price of feed during the growing period weighted as follows: May, 2; June, 6; July, 11; August, 15; September, 19; October, 23; and November, 24.

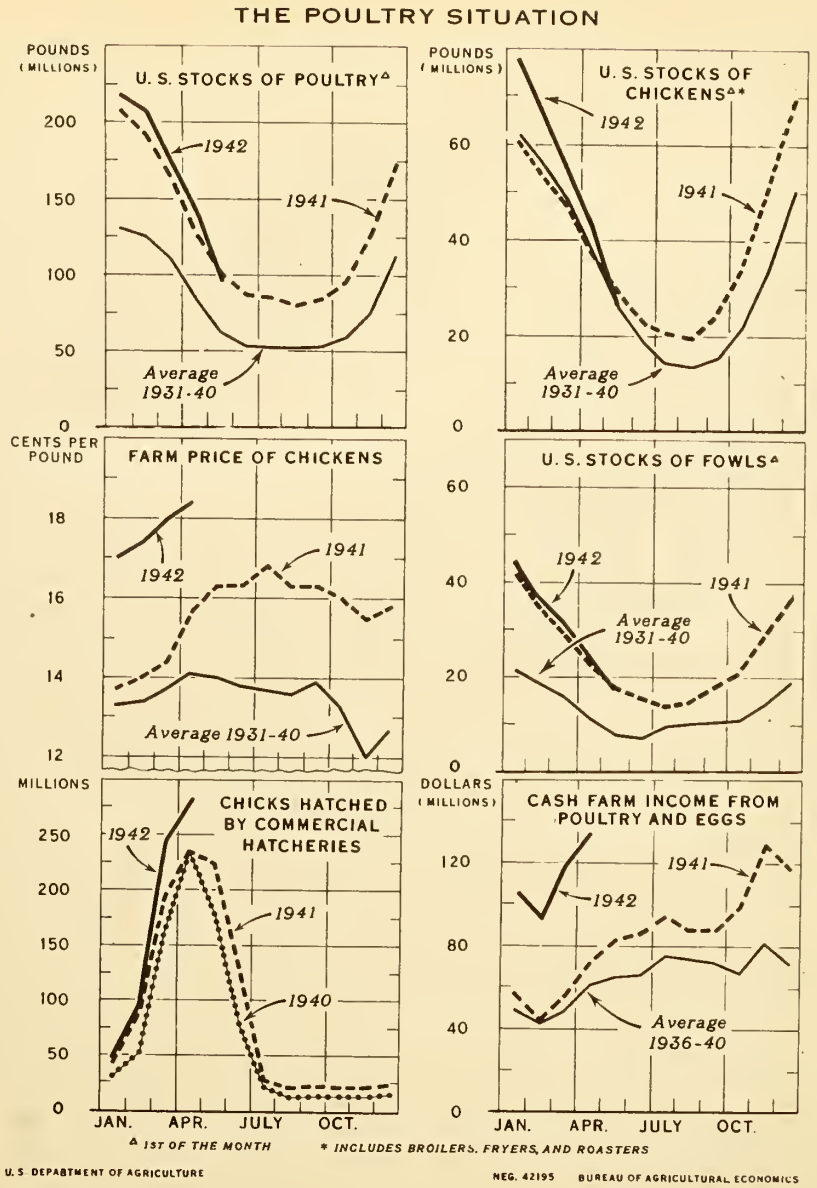


FIGURE 1

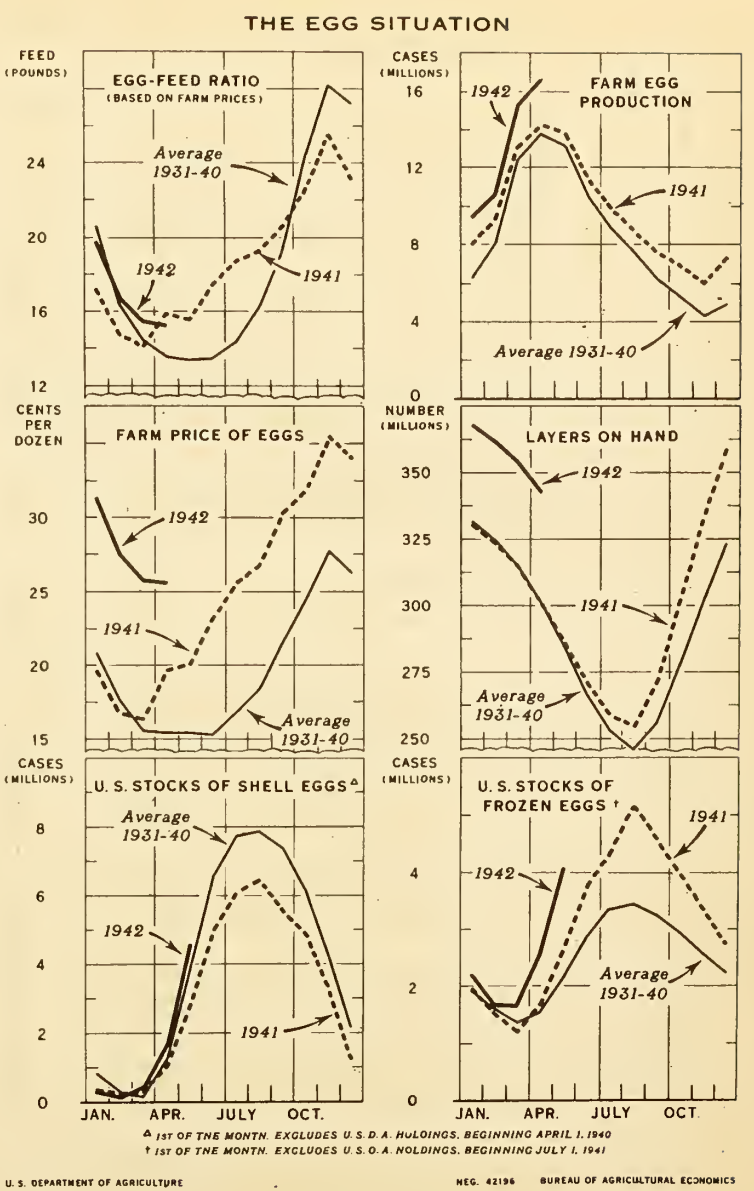


FIGURE 2

After five days return to
United States Department of Agriculture
Bureau of Agricultural Economics
Washington, D. C.

Penalty for private use to
avoid payment of postage $300

OFFICIAL BUSINESS

BUREAU OF AGR'L ECONOMICS LIBRARY

FNS-X-MESS WASHINGTON D C